IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process ~~for improving the brilliance of color and the stability of a colored polymer system, which is composed of a matrix and of discrete polymer particles distributed in accordance with a defined spatial lattice structure in the matrix, and which is obtained by filming of an emulsion polymer with core/shell structure,~~ which comprises forming a film from an aqueous emulsion of a polymer with core/shell structure, and then removing water from the aqueous film, thereby forming a polymeric film, wherein the polymeric film produces a visual effect upon reflection of electromagnetic radiation, and wherein the

~~utilizing an~~ emulsion polymer is obtained by

- polymerizing monomers in at least one first stage (core monomers),

- then polymerizing monomers in at least one further, second stage (transition stage), and

- finally polymerizing filmable monomers in a third stage (shell monomers),

where, based on the percentage constitution of the monomer mixtures of the three stages, at most 30% by weight of the monomers of the first stage are identical with those of the third stage, and at least 5% by weight of the monomers of the second stage are identical with, respectively, those of the first and those of the third stage, and not more than 60% by weight of the monomers of the [[2^{nd}]] second stage [[here]] are monomers absent in the [[1^{st}]] first stage and also absent in the [[3^{rd}]] third stage,

wherein said polymeric film comprises a matrix and discrete polymer particles distributed in the matrix, wherein the shells form the matrix and the cores form the discrete polymer particles.

Claim 2 (Currently Amended): The process as claimed in claim 1, wherein the polymer particles ~~of the colored polymer system~~ comprise one or more types of particle with a median particle diameter in the range from 0.05 to 5 μm, where~~, however,~~ each type of particle has a polydispersity index (PI) smaller than 0.6, calculated from the formula

$$PI = (D_{90}-D_{10})/D_{50}$$

where D_{90}, D_{10}, and D_{50} are particle diameters for which the following apply:

D_{90}: 90% by weight of the total weight of all of the particles have a particle diameter smaller than or equal to D_{90}

D_{50}: 50% by weight of the total weight of all of the particles have a particle diameter smaller than or equal to D_{50}

D_{10}: 10% by weight of the total weight of all of the particles have a particle diameter smaller than or equal to D_{10}

Claim 3 (Currently Amended): The process as claimed in claim 1, wherein the polymer particles ~~of the colored polymer system~~ comprise one type of particle.

Claim 4 (Previously Presented): The process as claimed in claim 1, wherein the entirety of the emulsion polymer is composed of at least 40% by weight of what are known as main monomers, selected from the group consisting of C_1-C_{20}-alkyl (meth)acrylates, vinyl esters of carboxylic acids which contain up to 20 carbon atoms, vinylaromatics having up to 20 carbon atoms, ethylenically unsaturated nitriles, vinyl halides, vinyl ethers of alcohols which contain from 1 to 10 carbon atoms, aliphatic hydrocarbons having from 2 to 8 carbon atoms and one or two double bonds and mixtures of these monomers.

Claim 5 (Currently Amended): The process as claimed in claim 1, wherein the polymer particles ~~of the colored polymer system~~ and the matrix differ in refractive index.

Claim 6 (Currently Amended): The process as claimed in claim [[1]] 5, wherein the difference in refractive index is at least 0.01.

Claim 7 (Previously Presented): The process as claimed in claim 1, wherein the polydispersity index of the discrete polymer particles is smaller than 0.45.

Claim 8 (Previously Presented): The process as claimed in claim 1, wherein the core of the emulsion polymer has been crosslinked.

Claim 9 (Previously Presented): The process as claimed in claim 1, wherein the core-to-shell weight ratio in the emulsion polymer is from 1:0.05 to 1:20.

Claim 10 (Currently Amended): The process as claimed in claim 1, wherein the distance between the discrete polymer particles of the ~~colored polymer layer~~ polymeric film is from 20 to 50 000 nanometers.

Claim 11 (Currently Amended): The process as claimed in claim 1, wherein a transparent polymer layer is applied to the ~~colored polymer system~~ polymeric film.

Claim 12 (Currently Amended): The process as claimed in claim [[1]] 11, wherein the entirety of the polymer of the transparent layer is composed of at least 40% by weight of what are known as main monomers, selected from the group consisting of C_1-C_{20}-alkyl

(meth)acrylates, vinyl esters of carboxylic acids which contain up to 20 carbon atoms, vinylaromatics having up to 20 carbon atoms, ethylenically unsaturated nitriles, vinyl halides, vinyl ethers of alcohols which contain from 1 to 10 carbon atoms, aliphatic hydrocarbons having from 2 to 8 carbon atoms and one or two double bonds and mixtures of these monomers.

Claim 13 (Currently Amended): The process as claimed in claim [[1]] 11, wherein the polymer of the transparent layer is an emulsion polymer.

Claim 14 (Previously Presented): The process as claimed in claim 13, wherein the emulsion polymer has a ponderal median particle diameter of from 10 to 500 nm.

Claim 15 (Currently Amended): The process as claimed in claim [[1]] 11, wherein the polymer of the transparent layer is applied in the form of a solution or dispersion to the ~~colored layer~~ polymeric film, and a drying process then takes place.

Claim 16 (Currently Amended): The process as claimed in claim [[1]] 11, wherein the thickness of the transparent layer is from 0.2 to 500 μm.

Claim 17 (Currently Amended): ~~A process for improving the brilliance of color and the stability of a colored polymer system, which is composed of a matrix and of discrete polymer particles distributed in accordance with a defined spatial lattice structure in the matrix~~ The process as claimed in claim 1, which additionally comprises heating the ~~colored polymer system~~ polymeric film ~~and, optionally, the transparent polymer layer~~ to temperatures above 60°C.

Claim 18 (Currently Amended): A ~~colored polymer system~~ polymeric film, obtained by a process as claimed in claim 1.

Claim 19 (Canceled).

Claim 20 (Currently Amended): The process as claimed in claim [[1]] 5, wherein the difference in refractive index is at least 0.1.

Claim 21 (Previously Presented): The process as claimed in claim 13, wherein the emulsion polymer has a ponderal median particle diameter of from 30 to 200 nm.

Claim 22 (Currently Amended): A method of coating a ~~composition~~ substrate comprising coating the ~~composition~~ substrate with the ~~colored polymer system~~ polymeric film as claimed in claim 18.

Claim 23 (Currently Amended): The method as claimed in claim 22, wherein the ~~composition~~ substrate is plastic, plastic film, paper, packaging or a visual display.

Claim 24 (Currently Amended): A coated ~~composition~~ substrate wherein the coated ~~composition~~ substrate is coated by the method as claimed in claim 22.

Claim 25 (New): The process as claimed in claim 11, which additionally comprises heating the polymeric film and the transparent polymer layer to temperatures above 60°C.

Claim 26 (New): The process as claimed in claim 1, wherein the monomer mixture of the third stage has a glass transition temperature (T_g) that is lower than the T_g of the monomer mixture of the first stage.

Claim 27 (New): The process as claimed in claim 26, wherein the monomer mixture of the third stage has a T_g that is lower than the T_g of the monomer mixture of the first stage by at least 10°C.

Claim 28 (New): The process as claimed in claim 26, wherein the monomer mixture of the third stage has a T_g that is lower than the T_g of the monomer mixture of the first stage by at least 20°C.

Claim 29 (New): The process as claimed in claim 1, wherein none of the monomers of the first stage are identical with those of the third stage.

Claim 30 (New): The process as claimed in claim 1, wherein at least 40% by weight of the monomers of the second stage are identical with, respectively, those of the first and those of the third stage.

Claim 31 (New): The process as claimed in claim 1, wherein no monomers of the second stage are monomers absent in the first stage and also absent in the third stage.

Claim 32 (New): The process as claimed in claim 1, wherein the transition stage of the emulsion polymer has been crosslinked.